

## REMARKS

### **I. INTRODUCTION**

Applicants thank the Examiner for the indication of allowable subject matter in claims 3-4 and 11. Applicants have amended claims 1-3, 5-8 and 10-12. Accordingly, claims 1-12 are presently pending in this application. Applicants respectfully request reconsideration of the application in view of the foregoing amendments and the following arguments.

### **II. AMENDMENTS TO THE CLAIMS**

Applicants have amended each of claims 1-3, 5-8 and 10-12 to clarify the recitation of the invention. Applicants submit that none of these amendments adds any new matter.

### **III. REJECTION OF CLAIMS 1-4, 6-7 AND 12 UNDER 35 U.S.C. § 112**

Claims 1-4, 6-7 and 12 stand rejected under 35 U.S.C. § 112, ¶ 2, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as their invention. In particular, the Examiner has identified the use of “or” within the claims and the recitation of “the or a groove” and similar phrases. Applicants have amended claims 1-3, 6-7 and 12 to remove the word “or” and the identified phrases and to clarify the recitation of the invention. Applicants therefore submit that the rejection has been overcome and request that the rejection be withdrawn.

### **IV. REJECTION OF CLAIMS 1-2, 5-9 AND 12 UNDER 35 U.S.C. § 102(B)**

Claims 1-2, 6-9 and 12 stand rejected under 35 U.S.C. § 102(b) as anticipated by Liou (U.S. Patent No. 6,019,586). Applicants have amended claim 1-2, 6-8 and 12 to clarify the recitation of the invention as set forth above. Applicants respectfully submit

that the rejection of claims 1-2, 6-8 and 12 under 35 U.S.C. § 102(b) is improper because Liou does not disclose or suggest all of the limitations recited in the claims as amended. In re Paulsen, 30 F.3d 1475, 1478-79, 31 U.S.P.Q.2d 1671 (Fed. Cir. 1994); Verdegaal Bros. v. Union Oil Co. of California, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1997) (“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”).

Independent claim 1, as amended, recites a pump having a first idler screw with includes a first screw form having a land surface, “the land surface having a first and a second edge portion....the distance between the first edge portion and the longitudinal axis of the first idler screw being substantially constant over the length of the first screw form and the distance between the second edge portion and the longitudinal axis of the first idler screw being substantially constant over the length of the first screw form.”

Applicants respectfully submit that Liou does not disclose or suggest a pump meeting the above-recited limitations.

Liou discloses a pump with a power screw 2 and an idler screw 2'. Each of the power screw 2 and idler screw 2 are frusto-conical in shape (i.e., the diameters of the screws varies moving from one end of the corresponding screw to an opposite end of the corresponding screw). As a result, the distance of the land surface 21 on the idler screw 2'—and the distance of the edge portions of the land surface 21—with respect to the longitudinal axis 30 of the idler screw vary over the length of the screw form in the idler screw. The distance between the edge portions of the land surface and the longitudinal axis of the idler screw are therefore not “substantially constant over the length of the first screw form” as recited in independent claim 1.

Because Liou does not disclose or suggest a pump meeting all of the limitations of independent claim 1, Applicants submit that the rejection of claim 1 under 35 U.S.C. § 102(b) is improper and request that the rejection be withdrawn. Further because each of claims 2, 5-9 and 12 depend from independent claim 1, Applicants submit that the rejection of claim 2, 5-9 and 12 under 35 U.S.C. § 102(b) is also improper and request that the rejection be withdrawn.

**V. REJECTION OF CLAIM 10 UNDER 35 U.S.C. § 103(A)**

Claim 10 stands rejected as being unpatentable under 35 U.S.C. § 103(a) over Liou (U.S. Patent No. 6,019,586). Applicants respectfully submit that the rejection of claim 10 under 35 U.S.C. § 103(a) is improper because Liou fails to disclose or suggest all of the limitations in the claim.

“Patent examiners carry the responsibility of making sure that the standard of patentability enunciated by the Supreme Court and by the Congress is applied in each and every case.” MPEP § 2141 (emphasis in original).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations.

MPEP § 2143. Applicants submit that Liou fails to teach or suggest all of the limitations set forth in the claim.

Claim 10 depends from independent claim 1 and therefore incorporates all of the limitations set forth in independent claim 1. As set forth hereinabove in Section IV, Liou fails to disclose or suggest a pump meeting all of the limitations in claim 1. In particular,

Liou does not disclose or suggest a pump in which the edge portions of the land surface of a screw form on the idler screw are “substantially constant over the length of the first screw form”.

Because Liou does not disclose or suggest a pump meeting all of the limitations recited in claim 10, Applicants respectfully submit that the rejection of claim 10 under 35 U.S.C. § 103(a) is improper. Accordingly, Applicants request that the rejection of claim 10 under 35 U.S.C. § 103(a) be withdrawn.

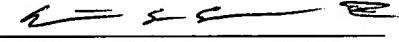
## **VI. SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Applicants have submitted herewith a Supplemental Information Disclosure Statement listing references cited in a search report issued by the U.K. Patent Office in connection with the priority application. Applicants request consideration of the cited references.

## VII. CONCLUSION

For the above cited reasons, all of the claims presently pending in this application are believed to be allowable. If the Examiner has any further questions or concerns, the Examiner is invited to contact the Applicant's undersigned attorney.

Respectfully submitted,

  
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William F. Kolakowski III  
Registration No. 41908  
Customer No. 26,127  
DYKEMA GOSSETT PLLC  
39577 Woodward Ave., Ste. 300  
Bloomfield Hills, MI 48304  
(248) 203-0822  
Attorney for Applicant

BH01\479731.1  
ID\WFK